ARNON et al. - Appln. 30. 09/687,141

a sensor operative to sense the action performed on said at least one input zone, and to generate signals in response to said action, said sensor being an acoustic sensor; and a processor in communication with said sensor operative to process said signals for

AD

(Amended) A method for data input comprising:

performing an operation associated with said at least one input zone.

generating an optical image of a data input device, said image comprising at least one input zone actuable by an action performed thereon by a user;

performing an action on said at least one input zone;

sensing the action performed on said at least one input zone, said sensing comprising:
detecting light reflected from an object within a silhouette of said image; and
analyzing a reflection of said light to determine a spatial position of the object;
generating signals in response to said action; and

processing said signals for performing an operation associated with said at least one input zone.

__ Kindly add the following new claims:

36. A method according to claim and wherein said sensing also comprises providing a light beam emanating from a light source.

32.37. A method according to claim 36 and wherein said sensing also comprises analyzing an angle of said light beam to determine a spatial position of the object.

3338. A method for data input comprising:

generating an optical image of a data input device, said image comprising at least one input zone actuable by an action performed thereon by a user;

performing an action on said at least one input zone; sensing the action performed on said at least one input zone, said sensing_comprising: providing a non-visible light beam emanating from a non-visible-light source; detecting an image of said non-visible light impinging upon an object; and analyzing said image of said non-visible light to determine a spatial position of the

object;
generating signals in response to said action; and

processing said signals for performing an operation associated with said at least one input zone.

39. A method according to claim 38 and wherein said step of analyzing also comprises analyzing an angle of said light beam to determine a spatial position of the object.

AU



ARNON et al. - Appln. 40. 09/687,141

The method according to claim 38 wherein the step of analyzing also comprises analyzing an angle of said light beam and a time for the beam to be reflected back from said object to a reference to determine a spatial position of the object.

A data input device comprising:

an optically generated image of a data input device, said image comprising at least one input zone actuable by an action performed thereon by a user;

a sensor operative to sense the action performed on said at least one input zone, and to generate signals in response to said action, said sensor being operative to:

detect light reflected from an object within a silhouette of said image; and analyze a reflection of said light to determine a spatial position of the object; and a processor in communication with said sensor operative to process said signals for performing an operation associated with said at least one input zone.

The device according to claim 41 and further comprising a light source which generates a light beam, and beam-moving apparatus which moves said light beam to generate said optically generated image of said data input device.

The device according to claim 22 wherein said beam-moving apparatus comprises a mirror arranged to reflect said light beam.

The device according to claim 33 and further comprising an actuator operatively connected to said mirror, wherein said actuator moves said mirror to reflect said light beam to form at least a two-dimensional image of said data input device.

The device according to claim 42 wherein said beam-moving apparatus comprises a scanner arranged to scan said light beam, and an actuator operatively connected to said scanner, wherein said actuator moves said scanner to scan said light beam to form at least a two-dimensional image of said data input device.

H146. The device according to claim 41 wherein said data input device comprises a key of a keyboard.

The device according to claim #1 wherein said data input device comprises a keyboard.

The device according to claim Al wherein said data input device comprises a mouse with at least one input button.

The device according to claim Al wherein said data input device comprises a key of a touch pad.





ARNON et al. - Appln. 30. 09/687,141

The device according to claim 41 and wherein said sensor analyzes an angle of said light to determine a spatial position of the object.

th

51. The device according to claim #1 wherein said sensor analyzes an angle of said light and a time for said light to be reflected back from said object to a reference to determine a spatial position of the object.